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Art. XLI.—*A Botanical Excursion in Teesdale, in July*, 1840.

By Samuel King, Esq.

Lane House, Luddenden, near Halifax,
October 20, 1841.

Sir,

Taking it for granted that any communication respecting plants will be acceptable for your periodical, I take the liberty of sending a short account of a botanical excursion in Teesdale in July, 1840. If you think it worth printing it is quite at your service.

Yours &c.

Samuel King.

To the Editor of 'The Phytologist.'

On the 20th of July my companion and myself left Darlington for Barnard Castle, a distance of sixteen miles. The common hedge-plants of this neighbourhood are Ballota nigra, Lamium album, Bryonia dioica, Potentilla reptans and anserina, Cynoglossum officinale, Lycopsis arvensis, Hordeum murinum, Conium maculatum, Reseda luteola, Chærophyllum temulentum, Lychnis vespertina, &c. We arrived at Barnard Castle about 11 o'clock, and proceeded to Cotherston (a distance of four miles), where we commenced our work by going up Balderdale in search of the rare Saxifraga Hirculus: as we went on we observed Cnicus heterophyllus, Ribes petræum, Geranium sylvaticum, &c. After walking about four miles we arrived at Hurry; here we learned that a person named Joseph Raine, who resided at a farm-house called East Waybut, knew something about the plant we were in search of. At about a mile farther on we came to the house and found the man, who readily undertook to conduct us to the spot where the Saxifraga was growing: he knew the plant well, and gave us two specimens which he happened to have by him. When we had gone about two miles farther up the valley, which is wild and barren, we crossed the water and got on the edge of Cotherston Fell, about half a mile below the junction of the Black Beck and Balder Beck: here we found plenty of Saxifraga Hirculus growing among moss in a wet swampy place, in company with Sedum villosum, but being too early in the season, we could obtain but two plants in flower. We then returned to the house of our guide, and wrote our addresses with a quill pen upwards of twenty years old; in the following August our guide collected for me a number of specimens of the Saxifraga, and transmitted them by post. On leaving our guide's house he directed us over the fells to Middleton in Teesdale, about six miles distant; but in consequence of losing our road on the fells, we did not arrive there until late.

Next morning, accompanied by Mr. Thompson, the landlord of the Talbot Inn, we started for High Force Inn, distant five miles, calling in our way at New Bigging. Thence we passed over the fields to Winch Bridge, where the Tees is crossed by a foot bridge. Here the troubled stream of the Tees is confined by rocks, upon which, and on the adjoining ground, grow Serratula tinctoria, Cnicus heterophyllus, Galium boreale, Rubus saxatilis, Potentilla fruticosa, Melampyrum sylvaticum, Polygonum viviparum, Plantago maritima, Geranium sylvaticum, Festuca vivipara, Primula farinosa, Pyrus Aria, Trollius europæus, Rosa Sabini and involuta, and some other species which require more examination in a growing state. I do not find any record of this locality for the two roses here mentioned, which I discovered here, on the Yorkshire side of the Tees. The latter is said to grow in the Hebrides and Western Highlands of Scotland, but as far as my knowledge extends, this is the first time of its having been gathered south of the Tweed. One old plant was all that I found at the time, a sucker from which is now growing freely in my garden. I am inclined to think that Rosa Doniana of Smith grows freely in the same place. This spot is about a mile from High Force Inn. In the afternoon we visited High Force, which was an awfully grand sight, the river being much swollen by the heavy rains. We here observed plenty of Cnicus heterophyllus, Brachypodium pinnatum, &c.

The morning of July 22nd being fine, we set out, with Mr. Scott the landlord for our guide, he being well acquainted with the localities of all the rare plants of the neighbourhood. We proceeded by way of Whey Syke, crossed Langdon Beck, and so on to Widdy Bank, where we gathered Bartsia alpina, Gentiana verna (in seed), Carex capillaris, Equisetum variegatum, Parnassia palustris, Tofieldia palustris, Saxifraga aizoides, Lycopodium Selaginoides, &c. Widdy Bank being an extensive tract it will be necessary to say that the place where we gathered the above plants was the sloping bank of the Tees, in Widdy-Bank Farm. From this spot we proceeded to Falcon Clinks; here grow Lycopodium Selago, Cryptogramma crispa, Asplenium Trichomanes, viride and Ruta-muraria, Sedum Telephium, Vaccinium Vitis-idæa and Juniperus communis, in great abundance. Here I cast around many an anxious look for Woodsia Ilvensis; at length, after much searching, and a good wetting from the drip of the water from the huge basaltic rocks, to my great joy I espied two small plants, which were instantly secured; a little farther on we saw three more under a bush of Prunus Padus, but not liking to destroy the plant, we left the roots of these in the crevice of the rock where they were growing. After resting awhile under the Clinks, I had another round at searching for this wee fern, but without success, so I was obliged to leave the spot with an impression that one day or other it would be extinct there. As we passed along I observed plenty of what I then called Asplenium viride, but not wanting that plant I did not gather any, it now however strikes me forcibly that among this was Asplenium fontanum also. A few hundred yards above the last-mentioned locality is Caldron Snout. This is a place where the Tees, which above here runs on a level, now rushes with tremendous fury down among rocks for I should think not less than a hundred yards. Over the Snout is a narrow wooden bridge, connecting the counties of Durham and Westmoreland, which we crossed, and in traversing the extreme point of the latter county, found Ajuga alpina? Habenaria viridis, Gentiana campestris &c. We then forded the swollen Maize Beck into Yorkshire, and obtained a fine view of the Snout. Passing along we gathered Sedum villosum, Saxifraga hypnoides, Rubus Chamæmorus &c. At length we reached the summit of Cronkley Fell, and there we gathered Lycopodium alpinum, Dryas octopetala, Cistus marifolius and Helianthemum, Carex capillaris and pulicaris, Tofieldia palustris, Arenaria verna, Gentiana verna, Thalictrum alpinum, Anthyllis vulneraria, Aira cristata, Hippocrepis comosa, Thymus Serpyllum, &c. Pursuing our course towards Cronkley Bridge, we gathered Carex binervis, Avena pratensis and pubescens, and Habenaria viridis; we then recrossed the Tees to the Durham side, when our guide left us, taking the nearest road home, and we went down the valley, where Potentilla fruticosa and other plants grow in abundance. For more than a mile we were almost lost in juniper bushes, with the river on our right hand and high cliffs on our left: here we found Arbutus Uva-ursi. When we again reached High Force we gathered Festuca vivipara and Avena alpina? on the rocks; this is another place where the river falls twenty or thirty yards down the rocks, which are here, as in other parts of Teesdale, gloriously painted with Lecidea geographica.

The next day we returned homewards, well laden with plants; visited the lead-mines at Middleton, fourteen miles from Brough. At Church-Brough Castle gathered Trifolium procumbens, Carduus acanthoides and Conium maculatum. Here we had to wait five hours before the coach came up from Barnard Castle to take us to Kirby Lonsdale. We had scarcely taken our seats when the horses started off without guard or coachman, and upset the coach on a bridge; I was so much injured as to be quite incapable of making further observations, and thus ended my botanical excursion in Teesdale.

ART. XLII. — *List of Plants collected by M. Schimper in Abyssinia.*

By N. B. WARD, Esq.

Wellclose Square, October 20, 1841.

My dear Sir,

Among the numerous collections of plants made by the Unio Itineraria, there are few that equal, and none that surpass in interest, the collection made by Schimper in Abyssinia. The portion which has reached this country contains about 300 species, mostly procured in the neighbourhood of Adowa; an enumeration of which I send you, as I think it will gratify the readers of 'The Phytologist.'

I have marked with an * the few species which are also natives of Britain.

And am,
My dear Sir,
Your's very truly,
N. B. WARD.

To the Editor of 'The Phytologist.'

Ranunculaceæ.
Clematis simensis
  glaucescens
Delphinium dasycaulon
Umbelliferæ.
Hydrocotyle asiatica
*Sium nodiflorum
Anethum graveolens
Caucalis abyssinica
Tragium hirtellum
Ammi pauciradiatum
Torilis africana
Vitaceæ.
Cissus adenantha
Cissus Schimperi
Vitis erythrodes
Myrtaceæ.
Syzygium guineënse
Loranthaceæ.
Viscum nervosum
Loranthus Schimperi (No. 250)
Cucurbitaceæ.
Momordica pterocarpa
Bryonia scrobiculata
Resedaceæ.
Reseda abyssinica
Sapindaceæ.
Dodonæa arabica
Polygalaceæ.
Polygala punctulata
Linaceæ.
Linum abyssinicum
Sterculiaceæ.
Xeropetalum Brucei. Pentapetes. Bruce, Tr. v. pl. 2.
Malvaceæ.
Pavonia Schimperiana
Sida triloba
  tricuspis

Sida Schimperiana
Urena mollis
Hibiscus macranthus
(Polychlæna) adoënsis
Tiliaceæ.
Grewia ferruginea
Sparmannia abyssinica
Triumfetta Vahlii
Lythraceæ.
Grislea micropetala
Meliaceæ.
Turræa abyssinica
Trichilia Rüppelliana
Rhamnaceæ.
Halinus mystacinus
Zizyphus Spina-Christi
Euphorbiaceæ.
Clutia lanceolata
Rottlera Schimperi
Tragia cordata
Euphorbia depauperata
(No. 274)
Celastraceæ.
Celastrus edulis
obovata
Schimperi
Celastr. sub-or. Hippocrateæ.
Hippocratea Schimperiana
Silenaceæ.
Silene (No. 290)
Uibelinia abyssinica
Alsinaceæ.
Alsine Schimperi
Illecebraceæ.
*Polycarpon tetraphyllum
Xanthoxylaceæ.
Brucea antidysenterica
Geraniaceæ. [atum
Pelargonium multibracte-
Oxalideæ.
Oxalis (No. 188)
Rosaceæ.
Rosa Schimperiana
Leguminosæ.
Virgilia aurea
Crotalaria spinosa
Trigonella marginata
Schimperi
Trigonella multinervis
Trifolium subrotundum
simense
Indigofera parvula
(No. 349)
Glycine micrantha
elegans
Tephrosia interrupta
Sesbania ferruginea
Colutea (No. 240)
Ornithopus coriandrinus
Zornia angustifolia
Alyssicarpus ferrugineus
*Vicia angustifolia
Fagelia resinosa
Dolichos (No. 226)
Phaseolus (No. 50)
Pterolobium lacerans
Cassia nictitans
(No. 29)
Mimosa Habbas
Acacia Lahai
Isenbergiana
albida
Crassulaceæ.
Tillæa pharnaseoides
Sempervivum abyssinicum
Cotyledon deficiens
Anacardiaceæ.
Rhus
(No. 331)
Anamaza trifoliata
Urticaceæ.
Ficus (No. 373)
(No. 157)
(No. 149)
Urtica (No. 74)
Santalaceæ.
Thesium radicans
Osyris abyssinica
Amarantaceæ.
Amaranthus (No. 359)
Celosia adoënsis
Pupalia globosa
Schimperiana
Phytolaccaceæ.
Phytolacca abyssinica
Polygonaceæ.
Polygonum macrochæton
salicifolium
herniarioides
(Fagopyrum) nepalense
Rumex abyssinicus
alismæfolius
Steudelii
Ceratogonum sinuatum
Scleranthaceæ.
* Scleranthus annuus, var.
[abyssinicus
Nyctaginaceæ.
Boerhaavia (No. 48)
Ericaceæ.
Erica acrophyza, Fresen.
ab E. arborea vix
diversa
Primulaceæ.
Lysimachia adoënsis
Myrsinaceæ.
Myrsine africana
Kellan
Mæsa (Bœolotrys) picta
Sapotaceæ.
Mimusops Kummel
Convolvulaceæ.
Convolvulus echioides
Campanulaceæ.
Campanula rigidipila
Lightfootia abyssinica
Cephalostigma Schimperi
Cinchonaceæ.
Pavetta longiflora
Oldenlandia (No. 68)
Rubia cordifolia
Anthospermum (No. 94)
Kohautia (No. 75)
Compositæ.
Vernonia Schimperi
abyssinica
Cyanopsis Leopoldi
Sphæranthus indicus
Dicrocephala abyssinica
Conyza abyssinica
Schimperi
gnaphalioides
baccharioides

Phagmalion abyssinicum
Laggera (Blumea) tomentosa
  purpurascens
  crassifolia
Gnizottia oleifera
  Schultzii
Bidens abyssinica
Spilanthes abyssinica
Cotula abyssinica
Helichrysum abyssinicum
Achyrocline Schimperi
Gnaphalium Unionis
(Helichrysum) Steudelii
Cineraria abyssinica
  Schimperi
Senecio abyssinicus
  Hochstetteri
  Schimperi
Tripteris cheiranthifolia
Kentrophyllum alatum β, abyssinicum
Carthamus tinctorius
Gerbera abyssinica
(Leptica) Schimperi
Schmidtia (Tolpis) abyssinica
Klenzea abyssinica
Adenostemma Schimperi
Chelinsia abyssinica
Prestinaria bidentoides
  abyssinica
Wurschmittia abyssinica
Steugelia adoënsis
Linzia vernonoides

Dipsaceæ.

*Scabiosa Columbaria
Pterocephalus frutescens

Plantagineæ.

Plantago rugosa
  abyssinica

Plumbagineæ.

Valoradia abyssinica

Cordiaceæ.

Cordia abyssinica

Boragineæ.

[†]Trichoderma africanum
Anchusa affinis
Cynoglossum lanceolatum

Labiatæ.

Salvia abyssinica
  scabra
Mitracarpus sphærostigma
*Mentha Pulegium
  (No. 403)
Otostegia repanda
  integrifolia
Leonotis nepetifolia
Micromeria ovata
Ocimum lamiifolium
  coloratum
  filamentosum
  (No. 294)
  (No. 309)
  (No. 333)
Leucas Schimperi
Ajuga (No. 325)

Verbenaceæ.

*Verbena officinalis

Bignoniaceæ.

Bignonia discolor

Acanthaceæ.

Barleria pumila
  bispinosa
  abyssinica
  inæqualis
Justicia calcarata
Ruellia multicaulis
Asteracantha macracantha
Hypoëstes glandulosa
Gendarussa (Adhatoda) Schimperiana

Scrophularineæ.

*Antirrhinum Orontium
*Linaria Elatine
Anarrhinum fruticulosum
Bartsia abyssinica
Buchnera Schimperiana
Buddleia polystachya
Craterostigma plantagineum

Solanaceæ.

Solanum adoënse
  bifurcum

Apocynaceæ.

Strychnos abyssinica
Carissa edulis

Asclepiadeæ.

Periploca linearis
Kanahia laniflora

Oleaceæ.

Nathusia alata

Jasmineæ.

Jasminum abyssinicum

—

Amaryllidaceæ.

Hypoxis abyssinica

Irideæ.

Montbrettia abyssinica

Liliaceæ.

Asphodelus Chamæmoly
Asparagus

Commelinaceæ.

Commelina striata

Junceæ.

Juncus Schimperi

Fluviales.

*Potamogeton natans

Gramina.

Phalaris appendiculata
Tricholæna (Eriochloa) grandiflora
Eriochloa purpurascens
Panicum semiundatum
  patens
  ternatum
  geminatum
  quadrifarium
  brizanthum
  uniglume
  (Digitaria) muticum
  fenestratum

[†] I was induced, by the name of this plant, to examine the cuticle of the leaf under the microscope, and found it a most beautiful object, the cuticle being covered with hairs, surrounded at their base with pearl-like bodies. The same arrangement is seen in Onosma tauricum, and doubtless in many other Boragineæ.—*N. B. W.*

Panicum (Digit) abyssinicum
Pennisetum riparium
riparioides
longistylum
pentastachyum, Hoch.
(v. si mavis n. g. Pentastachya abyssinica)
Gymnothrix glabra
Schimperi
Andropogon connatus
polyatherus
Schimperi
insculptus
abyssinicus
Anthistiria punctata
Sporobolus capensis
Aristida cærulescens
Pappophorum Schimperianum
Chloris abyssinica
Setaria aurea
glauca
dioica
Michrochloa abyssinica
Dactyloctenium aristatum
Eleusine multiflora
flaccifolia [Roxb.?
Tocusso, Fres. stricta,
Leptochloa setacea
Danthonia Köstlini
elongata
abyssinica
Triticum (Brachypodium) Schimperi
Poa abyssinica
Eragrostis tenuifolia
longifolia
Catabrosa micrantha
Festuca abyssinica
Beckera polystachya, Fres.
Bromus adoënsis
†Londetia elegans
†Hypudæurus cenchroides
†Psilopogon Schimperi
†Harpachne Schimperi
†Triachyrum adoënse

Cyperaceæ.

Cyperus rotundus
*longus
Cyperus flagellatus
dichroostachyus
adoënsis
abyssinicus
Fischerianus
(No. 75)
(No. 273)
Mariscus Schimperi
Fimbristylis complanata
Isolepis (Bulbostylis) Schimperiana
Scirpus brachycerus
Rhynchospora trigyna, Hochst. (vel si mavis novum genus, Eriospora abyssinica)
Scleria cenchroides
Carex echinochloë

Filices.

Gymnogramma leptophylla
Adiantum thalictroides
Nephrodium Schimperianum

Musci.

*Entosthodon Templetoni

† Nova genera, Hochstetter.

ART. XLIII.—*A List of Plants met with in the neighbourhood of Swansea, Glamorganshire.* By J. W G. GUTCH, Esq.

(Continued from p. 109.)

Spiræa Ulmaria.

Cerasus Padus. At Pont Nedd Vechn, but not so common as it is about Merthyr Tydfil, (Dillwyn).

Rubus horridus. Fabian's Bay. (R. horridus of the Swedes, S. Rootsey).

—— *saxatilis.* On the mountains about Pont Nedd Vechn and Ystradgunlais.

Potentilla anserina. Common, Pentlegare.

—— *verna.* Found by Mr. Woods above the cliffs between Port Eynon and the Worm's Head, (Dillwyn).

—— *reptans.* Common.

—— *Fragariastrum.*

—— *Comarum.* Singleton Marsh, Cromlyn Bog and Pentlegare.

—— *Tormentilla.* Common in hedge-rows.

—— —— *β. nemoralis.* Occasionally found on wastes about Lansamlet, Cadoxton, &c. I have seen flowers with 4, and others with 5 petals, both on this and the more common form of the species.

Agrimonia Eupatoria. Common by road-sides.

Rosa spinosissima. On the Mumbles Road, very abundant.

— *canina*, *γ*. (*R. surculosa*, Woods). When my friend Mr. Woods was with me on a visit at Pentlegare, this was the only one of his numerous species which he appeared to consider rare, and he found it plentiful in Gower, and on the banks of the Penclawd Canal. Besides Rosa canina and tomentosa, there are other wild roses in the neighbourhood, but I confess my inability to distinguish from each other many of the species which my friend has described, and I know not which, or whether either of them, is entitled to a place among the British rariores.—(Dillwyn).

— *systyla.*

Alchemilla vulgaris and *arvensis.* Common.

Cratægus Oxyacantha. Mumbles Road.

Pyrus Malus.

— *torminalis.* Woods in Neath valley, and about Britton Ferry and Penrice.—(Dillwyn).

— *Aria.* Woods in Neath valley, (Dillwyn).

— *aucuparia.* Llandwr Marsh.

Ribes alpinum. Mr. Mulne, who was formerly head gardener to the late Lord Cawdor, has informed me that this plant propagates itself freely in the woods at Golden Grove, and is rarely cultivated in gardens, (Dillwyn).

Epilobium hirsutum. Cromlyn bog.

—— *parviflorum*, *roseum* and *tetragonum.* Banks of the Neath Canal, near Port Tennant.

—— *montanum.* Between Swansea and Port Tennant.

Circæa lutetiana. Hedges near Kilvey Hill; Singleton; common in shady places.

Myriophyllum spicatum. Cromlyn Bog.

Hippuris vulgaris. Marsh near Neath Canal.

Daucus Carota. Kilvey Hill.

—— *maritima.* Pennard; Gower.

Torilis Anthriscus. Kilvey Hill.

Angelica sylvestris. Kilvey Hill.

Crithmum maritimum. Rocks along the coast.

Œnanthe fistulosa. Near Singleton on the Marsh.

—— *pimpinelloides.* By the river-side on Llandwr Marsh.

—— *crocata.* Near Kilvey Hill.

Bunium flexuosum. Near Singleton.

Pimpinella Saxifraga. Town Hill.

Helosciadium nodiflorum. Near Singleton.

Carum verticillatum. Abundant in moist pastures near Cwmbola Bridge, Pentlegare, Drymma, and elsewhere throughout the neighbourhood.

Apium graveolens. Marshy places near the Neath Canal; Singleton and Port Tennant.

Chærophyllum temulentum. Fields near Singleton and Mumbles Road.

Conium maculatum. In hedges near the Infirmary, common.

Eryngium maritimum. On the sand-hills opposite Cambrian Terrace, Swansea; Cromlyn Burrows and Singleton.

Hydrocotyle vulgaris. Near Port Tennant.

Galium cruciatum. Fabian's Bay.

Galium palustre. Near Singleton Marsh.

——— *saxatile.* Kilvey.

——— *verum.* Found everywhere.

——— *Mollugo.* Common.

——— *Aparine.* Between the Ferry and Port Tennant.

Asperula odorata. Near Port Tennant and Cline wood.

——— *Cynanchica.* Between Swansea and Neath; also most abundant on the sand hills near Park, about 10 miles from Swansea; about Pennard Castle.

Rubia peregrina. Occasionally found about the cliffs, and on the Gower coast.

Cornus sanguinea. Near Port Tennant.

Vaccinium Oxycoccus. Pentlegare; and the field opposite the kennel of the Swansea harriers.

Campanula rotundifolia. Kilvey and Town Hills; and in great luxuriance, with particularly large flowers, on the sand hills near Pennard Castle.

——— *hederacea.* Not unfrequent in moist shady places in the Swansea and Neath valleys, in Cwm Clydach, (Dillwyn).

Jasione montana. Road leading to Kilvey Hill.

Lobelia Dortmanna. In the lake in Craig-dyn-fwr, above Aberpergwm, (Dillwyn).

Valerianella Auricula. Fabian's Bay.

——— *dentata.* Found by Mr. E. Hawkins at Glanbedue, (Dillwyn).

Dipsacus sylvestris. Banks of the Neath Canal, Fabian's Bay.

Scabiosa succisa. Kilvey Hill and Cline Wood.

——— *columbaria.* Pennard Castle.

Knautia arvensis. Port Tennant.

Eupatorium cannabinum. Common in wet ditches.

Inula crithmoides. Pennard and Mumbles; on rocks in Caswell Bay, and along the coast of Gower; plentiful near Paviland Cave.

—— *Helenium.* In pastures about Horton, Pentlegare, Pont nedd Vechn, Glanbrane and Cwm Cromlyn, (Dillwyn).

Pulicaria dysenterica. Between Swansea and Singleton; Kilvey Hill and road to the Mumbles.

Aster Tripolium. Marsh near Neath Canal.

Erigeron acris. Near the Ferry; Llandwr Marsh; Fabian's Bay; Singleton.

Solidago Virgaurea, var. *β. cambrica.* Frequently met with in the woods of Cwm Neath.

Gnaphalium margaritaceum. Near Clydach, in the road-side between Wych-tree Bridge and Neath Abbey, and other places, (Dillwyn).

——— *dioicum.* On the mountains above Pont Nedd Vechn and Ystradgunlais, (Dillwyn).

——— *sylvaticum.* About Drumma and Glanbrane, and on Markhowell, from which mountain it was brought to me by Mr. Edward Hawkins. Many of the specimens answered to Sowerby's figure of G. rectum, and if that is a separate species (which I disbelieve) they most probably belong to it, (Dillwyn).

——— *uliginosum.* On Singleton Marsh.

Senecio vulgaris. Everywhere.

——— *viscosus.* On the waste a little above high water mark, between the Ferry and the entrance to Port Tennant.

——— *Jacobæa* and *aquaticus.* Singleton Marsh.

Chrysanthemum Leucanthemum. Between the Ferry and Port Tennant.

Chrysanthemum segetum. Ballast-heap near West Pier.

Pyrethrum Parthenium. Neath Canal and St. Helen's.

——— *inodorum*. Common.

——— ——— var. *β. maritimum*. About Salt-house Point, and other places by the sea-shore, (Dillwyn).

Artemisia maritima. Near Port Tennant, and on the banks of the Neath Canal.

——— *Absinthium* and *vulgaris*. Near Port Tennant, on the shore and near the Ferry.

Tanacetum vulgare. Port Tennant.

Anthemis maritima. Sea-shore near Port Tennant.

——— *nobilis*. On rubbish at Penrice, but probably not indigenous, (Dillwyn).

——— *arvensis*. Common everywhere.

Achillæa Ptarmica. Banks of Neath Canal; Mumbles Road; near Port Tennant; in ditches by canal.

——— *Millefolium*. Common everywhere.

Bidens tripartita. Near the Neath Canal.

—— *cernua*. Near Singleton.

Carduus nutans. Singleton.

——— *tenuiflorus* and *arvensis*. Common.

——— *lanceolatus*. Between the Infirmary and Singleton.

——— *palustris*. Kilvey Hill and Loughor, common.

——— *eriophorus*. Occasionally found on the road-side between Neath and Pyle; and much more common at the eastern extremity of the county, (Dillwyn).

——— *pratensis*. Cromlyn Bog.

——— *acaulis*. Britton Ferry.

Carlina vulgaris. Banks of the Neath Canal, and Cromlyn Burrows.

Arctium Lappa and *Bardana*. Common.

——— *superfluum*. A variety of Bardana, so named by my friend Mr. Rootsey; between the Ferry and Port Tennant.

Serratula tinctoria.

Centaurea nigra. Kilvey Hill and Town Hill.

——— *Scabiosa*. Kilvey Hill and fields near.

Lactuca virosa. Oystermouth Castle.

Lapsana communis. Near Singleton.

Crepis virens. Town Hill and roofs of houses.

—— *paludosa*. On the rocky shore of the Neath river, and about Uscoed Eynon, near Pont Nedd Vechn, (Dillwyn).

Hieracium Pilosella. Near Port Tennant.

——— *sylvaticum* and *sabaudum*. Kilvey Hill.

——— *umbellatum*. Neath Canal.

Hypochæris radicata. Neath Canal.

Tragopogon pratensis. Singleton Marsh.

Thrincia hirta. Near Port Tennant.

Leontodon hispidum. A meadow-full of it on this side of Neath.

Oporinia autumnalis. Meadows and pastures, frequent.

Cichorium Intybus. Near Kilvey Hill.

J. W. G. GUTCH.

(To be continued).

Art. XLIV.—*Notices of Books &c. connected with British Botany.*

1. *A Manual of the British Algæ: containing Generic and Specific Descriptions of all the known British Species of Sea-Weeds and of Confervæ, both Marine and Fresh-water. By* The Hon. William Henry Harvey. London: Van Voorst. 1841. 8vo.

The beautiful family of plants known by the popular name of *sea-weeds*, has long excited the admiration not only of the mere sea-side rambler, but of many profound botanists. The names of Esper, Lamouroux, Mertens, Agardh, Lyngbye, Kützing and others on the continent; and of Stackhouse, Turner, Dillwyn, Hutchins, Griffiths, Berkeley, Greville and Harvey in our own country; are especially associated with these plants. It is, however, only within the present century that the algological Flora can be said to have assumed a strictly systematic form. The structure and affinities of the Algæ have, within this period, been carefully examined, their economy investigated, and their geographical position ascertained. The four great genera—*Tremella*, *Fucus*, *Ulva* and *Conferva*, into which Linnæus divided the comparatively few species he was acquainted with, have expanded, in the British Flora alone, into 127 for the most part well-defined genera; and a rigid analysis is at length applied to these as well as to other plants. In Great Britain, as might have been expected from the facilities which her shores present to the student, several works of standard merit have been devoted to their illustration. 'English Botany' contains figures (deficient in details) of all the species known at the time of its publication. The splendid 'Historia Fucorum' of Turner includes all the British species formerly described under the heterogeneous genus Fucus; and Dillwyn's 'Synopsis of the British Confervæ' contains illustrations of the equally heterogeneous Conferva; while in the 'Algæ Britannicæ' of Greville are given figures and analyses of the modern genera of the inarticulate tribes. Various species are also represented in the same author's 'Cryptogamic Flora;' and lastly, in point of time, Berkeley's 'Gleanings' illustrate many others belonging to the more minute and difficult groups, It was not, however, until the publication of the second volume of the 'British Flora' in 1833, that the whole of the British Algæ were brought together and described with methodical accuracy by Mr. Harvey, with the exception alone of the Diatomaceæ, which were contributed by Dr. Greville. Three years subsequently, the entire algological department of the 'Flora Hibernica' was executed in a most able manner by Mr. Harvey, and particular attention bestowed on some of the difficult genera, especially Callithamnion and Polysiphonia. One other work of eminent utility remains to be mentioned—the 'Algæ Danmonienses' of Mrs. Wyatt (under the superintendance of Mrs. Griffiths), on the plan of that beautiful collection, 'Algues de la Normandie, par J. Chauvin'; but of this publication, as well as of his views regarding the work immediately under consideration, we shall let our estimable author speak for himself.

"The want of a work in the English language, entirely devoted to the British Algæ, in which fuller descriptions should be given than the scope of Hooker's 'British Flora' admitted of, and in which all the known species should be included, has long been felt by lovers of this branch of Botany. Had my friend Dr. Greville completed, as was once his intention, his admirable 'Algæ Britannicæ,' no room would have been left for my humble labours, nor should I for a moment wish to take the subject out of such able hands. But his work has unfortunately stopped short with the "inarticulate" tribes, nor has he at present any intention of resuming it. The task has consequently fallen on my shoulders, and my object will be gained and my ambition fully satisfied, if, in the following pages, I have succeeded in affording any assistance to the researches of my fellow-students. I could have wished, and indeed had intended, that the work should be illustrated with figures, at least of the genera; but my limited stay in Europe did not afford time to prepare them, and it does not now appear desirable to delay the publication till they could be got ready. However they might have added to the beauty of the book, the student will experience little loss by their omission, who takes this Manual for what I wish it to be, a companion to the 'Algæ Danmonienses, published and sold by Mary Wyatt, Dealer in Shells, Torquay;' a most important work, now extending to four volumes, with a supplement, composed of *specimens* of 234 species, beautifully dried and correctly named. These volumes furnish the student with a help, such as no figures, however correctly executed, can at all equal,—nature's own pencil illustrating herself."

Of this 'Manual' we do not think it too much to say, that Mr. Harvey alone, among British botanists, was prepared to undertake it. For many years the Algæ, as we have seen, were his peculiar favourites, and he had carefully studied those groups which had been most imperfectly described by other authors.* His volume contains an ample Introduction, in which he considers the structure, habits and uses of these plants; and the descriptive portion is preceded by a Synopsis of the Families and Genera.

The general arrangement is that proposed by the author in the 'Flora Hibernica;' the families being primarily grouped under four series, as follows; the first three being chiefly characterized, as their names indicate, by the colour of their seeds.

Series I. MELANOSPERMEÆ, contains the families Fucoideæ, Lichineæ, Laminarieæ, Sporochnoideæ, Dictyoteæ, Ectocarpeæ, Chordarieæ.

Series II. RHODOSPERMEÆ.—Gloiocladeæ, Gastrocarpeæ, Spongiocarpeæ, Furcellarieæ, Florideæ, Ceramieæ.

Series III. CHLOROSPERMEÆ.—Lemanieæ, Batrachospermeæ, Chætophoroideæ, Conferveæ, Siphoneæ, Oscillatorieæ, Ulvaceæ, Nostochinæ, Byssoideæ?

Series IV. DIATOMACEÆ.—Desmidieæ, Fragillarieæ, Styllarieæ, Cymbelleæ.

It will be observed that Mr. Harvey has altogether done away with the old method by which the Algæ were primarily disposed according to the articulate or inarticulate character of the frond. This is surely a great improvement, as many forms occur which are strictly intermediate, by uniting both characters in the same individual.

We observe under Sporochnoideæ that Striaria Grevilliana of Pollexfen is reduced to a variety of Sporochnus rhizodes. This very singular plant we have ourselves examined, and are not prepared to question the decision at which the author has arrived; but the examination has led us to the conclusion that Sp. rhizodes itself might with propriety be placed in the genus Striaria, the character being slightly modified. A new species of Ectocarpus is described, which was discovered at Ballycastle by Miss Hincks; besides Ect. fasciculatus and pusillus, for the first time made known in the 'Algæ Danmonienses.'

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* Mr. Harvey's algological researches have not been confined to the British Flora. Vide his 'Genera of South African Plants,' and various papers in botanical periodicals.

The genus Naccaria, *Endl.* (Chætospora, *Ag.*), placed among the Ceramieæ by Agardh, and among the Florideæ by Greville, is brought under the Gloiocladeæ of Harvey. The author observes that the "habit is completely that of Gloiosiphonia and Mesogloia. The membrane, too, of the periphery, is formed of exceedingly minute, longitudinal fibres, cohering together. May not Naccaria therefore be regarded as a Mesogloia, wanting the verticillate filaments, except in the ramuli?" Our readers will recognise this plant as the rare Fucus Wiggii of Turner.

A plant of considerable interest, and which has been the occasion of a good deal of epistolary controversy, we find raised at length to the rank of a species. The Alga we allude to is Fucus alatus, γ. of *Turner*, (Delesseria alata, β. *angustissima*, 'Brit. Flor.'). It has been named Gelidium? rostratum by Mrs. Griffiths, and is assuredly quite distinct from Delesseria alata. We believe that all the mistakes which have arisen with respect to this subject, have been caused by very narrow varieties of Del. alata having been mixed with, or distributed instead of the true plant. It is remarkable that although found in considerable abundance in Morayshire, by Mr. Brodie, upwards of thirty years ago, it has never been collected by any other botanist.

We have already observed that Mr. Harvey is known to have investigated the Ceramieæ with great care; and we find abundant evidence of this in the work before us. It would be impossible to notice the many corrections which his observant and accurate eye has led him to make in this difficult family. We are truly glad to find that he has united Polysiphonia Agardhiana, badia and denudata with Pol. atrorubescens. Pol. Lyngbyæi, *Harv.* in 'Brit. Fl.' turns out to be a new species, and is now named P. Grevillii. We have also a new species named P. Griffithsiana, and two Irish ones named by their discoverer, Mr. Moore, P. affinis and atro-purpurea.

The most interesting addition, however, to the British Flora in the whole volume, is the exquisitely beautiful Thorea ramosissima, no native specimens of which exist, we believe, in any herbarium. But the late Mr. Templeton has left a note of its having been discovered "in a pool in a bog in the Co. Donegal mountains, going from Letterkenny to Dumfanaghy." The plant is too remarkable, and Mr. Templeton's accuracy too well known, to admit of any doubt in regard to it.

We shall not dwell upon the Chlorospermeæ and the Diatomaceæ, more than to bear our cordial testimony to the care which has been bestowed upon them. These series contain the more obscure families, and doubtless much remains to be done for their farther elucidation. In the genus Conferva itself, as it now stands, characters will, we feel assured, be detected, for affording generic subdivision. It is in this part of the work that we feel the want of pictorial illustration; and we trust that when Mr. Harvey shall be called upon for another edition, he will be enabled to add those plates which we know he was most anxious should accompany his excellent Manual. It is indeed a work which must immediately become the text-book of every student of our marine Botany.

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2. *Collectanea for a Flora of Moray: or, a List of the Phænogamous Plants and Ferns hitherto found within the Province.* Elgin: printed by Alex. Russell, Courant Office. 1839.

We are always disposed to give a hearty welcome to a local Flora, whatever may be the district to which it relates; but the present work possesses peculiar claims to our kindest regard, for independently of the value of the Collectanea in a botanical point of view, they possess additional interest in our eyes from the circumstance that in almost every page we meet with the names of localities, once honoured with the presence of Scotland's Burns, and immortalized by the genius of our own Shakspeare.

Sir J. E. Smith, in his 'Tour on the Continent,' has remarked that "a plant gathered in a celebrated or delightful spot, is, like the hair of a friend, more dear to memory than even a portrait, because it excites the mind without presuming to fill it." The truth of this observation will, we think, be acknowledged by all who have been in the habit of seeking the botanical productions of any country, in their own peculiar habitats; and the remark applies even to the more common and less beautiful plants of a district, as well as to localities with no particular historical or poetical associations attached to them. But with how much deeper interest would such a plant as Alchemilla alpina be invested, if gathered at "the Fall of Foyers," perhaps on the very spot where Burns stood when he wrote in pencil the beautiful lines beginning—"Among the heathy hills and ragged woods"! Again, the pleasure of botanizing in the woods of Cawdor and Gordon Castles, and of collecting there Pyrola media and secunda or Circæa alpina, must surely be heightened by the remembrance that Burns himself had wandered in these very woods, since he tells us that he "crossed the country to Fort George, but called by the way at Cawdor, the ancient seat of Macbeth; there I saw the identical bed in which, tradition says, King Duncan was murdered;"—and that his well-known verses—"Streams that glide in orient plains," &c., were written when reluctantly relinquishing the kindness and hospitality of the noble owners of "Bonnie Castle Gordon." Then again, Brodie House and its Laird being so frequently mentioned in the Collectanea, we cannot fail to remember that Burns slept at Brodie House; and that we read in his journal—"Mr. Brodie tells me the muir where Shakspeare lays Macbeth's witch-meeting, is still haunted—that the country folks won't pass by night." This *muir* we presume to be "The 'Blasted Heath,' near Brodie;" if so, the midnight revels of Shakspeare's gay old ladies seem to have scared away all the country *plants* as well as country *folks*, for we find but one recorded as growing there—Orobus tuberosus, var. *tenuifolius*. Others of the Macbeth localities are also very frequently mentioned, as, for instance, Forres and its castle-hill; but we must leave poetry and poetical associations, and endeavour to give our readers some idea of the botanical contents of the work before us.

We are quite of opinion that if the rules laid down in Mr. Watson's excellent "Observations on the Construction of a Local Flora" ('Mag. of Zool. and Bot.' i. 424) were generally known and strictly adhered to, the scientific value of local Floras and lists of plants would be greatly enhanced, inasmuch as a greater degree of precision being followed in the compilation of such works, increased confidence in their accuracy would be felt on the part of those who have occasion to consult them. Acting therefore on this opinion, we think we cannot do better than to transfer these rules to our own pages, both with the view of bringing them more immediately under the notice of our readers, and also to exhibit from the Collectanea some examples of the practical application of the spirit of the rules. We must however premise that the work is not, strictly speaking, a local Flora, but simply such a carefully executed list of plants as we should be glad to see drawn up for every botanical district in the kingdom; by the circulation of which, as the compiler observes in the Preface, "among those who take an interest in the Botany of the North of Scotland, it is intended to show the result of inquiries hitherto made within the Province of Moray, and to afford a nucleus around which future discoveries and observations may be collected."

Rule "*First*, a local Flora, we take it, ought to relate to a definite area, and not pretend to include a wider space than has been really and well investigated."—(Mag. Zool. & Bot. i. 426).

"*Secondly*, we should have a full list of species and the more remarkable varieties; the nomenclature being adapted to that of the standard Floras which relate to Britain generally; generic and specific characters, descriptions and references being altogether omitted."—(Id.)

"*Thirdly*, we should desire to see the degree of scarcity or abundance of each species mentioned, in as close an accordance as possible with some fixed scale."—(Id. 427).

"*Fourthly*, the time of flowering, and the soil and situation affected by each species, should be given from actual observation."—(Id.)

"*Fifthly*, the general distribution of each species, and the localities of the rarer ones, are to be precisely shown."—(Id. 428).

"*Sixthly*, we should recommend the history of the species to be attended to."—(Id).

We will now illustrate these rules by examples from the 'Collectanea,' beginning with the first.

After describing the boundary lines of "*The Province of Moray*, or more strictly, the portion of Scotland kept in view while drawing up this List," the compiler proceeds,—"In extent and locality the district here selected very nearly corresponds to the "Elgin, or Eighth Botanical District of Scotland" as laid down and illustrated in a valuable paper lately read by Mr. Brand before the Edinburgh Botanical Society. In a district so extensive as this, and so little explored (particularly in the southern and western portions) there must be plants yet to be discovered, and many facts to be recorded regarding the distribution of those already met with. The most effectual method by which these objects could be accomplished, would be to institute separate and careful examinations of the several sections—such as parishes and other well-defined districts—into which the Province might be divided. And for this purpose this List, if interleaved, it is hoped will prove highly useful."—Preface, iii.

That the conditions of the second, third and fifth rules have been as far as possible complied with, will be evident from the following observations and extracts. The catalogue contains neither generic nor specific descriptions nor references, but gives the scientific names and localities of all the species discovered within the district, up to the time of publication.

"There are 724 species in the Catalogue of Moray Plants, of which 65 are marked (?) as *doubtfully native*, and 70 (‡) as *certainly introduced*.

	Dicotyl.	Monocotyl.	Acotyl.
Genera	269	64	12
Species	523	169	32"

—p. 30.

"Sir W. J. Hooker's 'British Flora,' 4th edition, is followed in the nomenclature and arrangement of the Collectanea. The signs used [to denote the comparative rarity and abundance of the species *within the district*] are those employed by the Edinburgh Botanical Society, [in the 1st edition of their Catalogue]. After these signs the provincial names are added to some of the more common plants. Localities are occasionally given for species which are very far from being rare; but where "&c." is not added, all the known stations are almost invariably inserted. The dates of discovery are stated in many instances; and, when no other authority is quoted, the compiler himself has found or gathered the plant, in the specified localities."—Pref. v.

This perhaps is the proper place to notice one feature of the Collectanea, by which its value to all who feel an interest in the geographical distribution of British plants is greatly increased. "At the foot of the page, and *under a line*, a few species are introduced as being, from their ascertained range in Britain, likely to form early additions to the Flora of Moray. It is on this account, and with the view of noting their localities in the adjoining districts, that they have been placed here. A comparison, however, of Lists I. and II. will show the plants, which are most probably undiscovered denizens, as they contain the species found on either side, but not yet within the Province."—Pref. v. The lists referred to are:—

"I.—*List of Plants, not observed in Moray, but found in Aberdeenshire, or in the eastern part of Banffshire.*" This List contains 89 species.

"II.—*List of Plants not observed in Moray, but found on the west side of Scotland and north of Oban and Iona, or in the counties north of the Caledonian Canal.*" Containing 69 species, 17 of which are common to both lists. Two other lists are also given; one of 66 species, not uncommon within sixteen miles of Edinburgh, but either not observed or very rare in Moray; and the other of 42 species of Moray plants which are not found within sixteen miles of Edinburgh.

With regard to the fourth rule, the omission of the times of flowering is perhaps of little importance, although they would have formed an interesting addition to the Collectanea; but we confess that we should have been glad to see some notice of the geological relations of the species growing in the district. On this subject the compiler observes:—

"In such a treatise as this, it is usual to give a sketch of the geological structure of the district. Such would have been attempted, had there been a sufficient number of facts ascertained to show that there was here really any connexion between the vegetation and the underlying formations. The distance from the shore, and the elevation above the sea level, seem to influence the distribution of the species far more than the mineralogical character of the strata over which they grow. Besides, throughout the Province generally, and especially in the lower part of it, there is such a vast accumulation of alluvial matter interposed between the rock and soil, that the nature of the latter and of its vegetation depends mainly upon the circumstance of the alluvial deposits or subsoil being mossy, gravelly or clayey. In a few spots within the Province, such as Craighalkie near Tomintoul, where the beds of limestone, subordinate to the primary stratified formations, crop out, there are occasionally to be found several species of plants, whose range is evidently circumscribed within the influence of the calcareous soil. *Avena pratensis* seems confined to soils of this nature, changing its habit as the proportion of their ingredients differs. Where there is a superabundance of limy matter the plant often assumes a glaucous and rigid appearance, which has probably originated the *A. alpina*, and causes it still to hold a place as a distinct species."—Pref. iv.

In the above extract there is much to confirm our own views respecting the geological distribution of plants. We are of opinion that it is by the surface soil *in* which they grow that plants are affected, and not by the rocks or strata *over* which they occur, unless the latter happen to lie so near the surface as to affect the surface soil, by altering its constituent parts or modifying their proportions. We have no doubt that elevation has considerable influence in the distribution of species; but we cannot help suspecting that the character of the soil of a given district exercises quite as powerful an influence. Avena pratensis and alpina mentioned above, confirm the truth of our position. These two plants, whether distinct species or merely different states of the same species, are confined to a calcareous soil, yet each has its own favourite modification of such a soil, and neither of them seems to occur except where the subordinate beds of limestone *crop out*. But our limits prevent our pursuing this interesting enquiry any farther at present.

The subject recommended to be attended to in the sixth rule is an exceedingly important one, and in one of its divisions — that relating to variations caused by change of situation or season, closely connected with the fourth. We however could not expect any information of this nature in a catalogue, whilst a local Flora would scarcely be complete without it.

A "Table of Altitudes within or on the borders of the Province of Moray," and extracts from meteorological journals kept at Elgin and Kingussie, nearly the most distant points of the Province, are very valuable additions to the Collectanea. The altitudes vary from 54 to 4390 feet. A comparison of the annual means of three years' observations of the thermometer and rain-gauge, at the two stations, exhibits a higher mean temperature by 2·8212 at Elgin than at Kingussie; the mean depth of rain at Kingussie exceeds that at Elgin by 6·860 inches.

In a recent number (Phytol. 94) was a notice of Professor Balfour's discovery of Monotropa Hypopitys within this province; and in our present number are some further remarks on this interesting addition to the Scottish Phænogamic Flora.

We must now take leave of the 'Collectanea for a Flora of Moray;' and in so doing would again express a hope that the Botany of every district in the kingdom may ere long be equally well illustrated.

Art. XLV.— *Varieties.*

80. *Remarks on British Carices.* In my last note (Phytol. 77) I made no enquiry as to how far the Carices in question are distinct as species; but it having been said (Id. 27) that there are figures of the fruit and its appendages of all the British Carices, if these Carices be British, we should certainly expect to find them there. Of Carex stictocarpa and angustifolia Hooker tells us he knows nothing, except what is said in Smith's 'English Flora;' and if Smith be correct in his descriptions, and I have no reason to believe otherwise, Carex stictocarpa is a very different plant from C. recurva. Of the latter I possess 79 varieties, and none of them will at all answer to the description given in 'English Flora' or the figure in 'English Botany.' What Hudson's Carex recurva might be I know not, but I consider C. angustifolia quite as distinct from cæspitosa as either C. stricta, aquatilis or acuta, although Hooker, in the 1st edition of his 'British Flora,' placed acuta in quite another division of his Carices. If Sir W. J. Hooker had ever seen Schkuhr's beautiful figure of C. tenella, I think he would never have said "May it not be a starved state of" C. remota. The two stamens of C. tenella I consider to be alone sufficient to keep it distinct as a species, to say nothing of its very smooth fruit, which is said to be convex on each side, with an entire beak. A fruit like this is very much at variance with Mr. Leighton's description of Carex remota, wherein he says,—the fruit is "plano-convex, ribbed, margins rough, orifice bifid."—(Flor. Shrop. 452). Mr. Leighton further says, speaking of the convex side of the fruit, "with a cord-like mass of ribs which proceed downwards from the bi-

fid orifice to a little above the middle, where it diverges into five ribs, which again converge and unite a little above the base." Now I am at a loss to know how any one could ever think that the starving of a plant would make all these changes of character;—to make the five-ribbed fruit of Carex remota become very smooth, and to turn plano-convex into one that is convex on both sides, and lastly its bifid orifice into one that is entire; not to say anything about the number of stamens, which, in the days of Linnæus, would almost have removed it into some other class. Of Carex Mielichoferi I know nothing, except from the figure in 'English Botany,' and what is said by Smith in 'English Flora;' but of Carex speirostachya I possess specimens from Wales and others from near Lancaster. The plant is certainly a very different one from C. fulva, and a section of the ripe nut of C. speirostachya would have been very conspicuous amongst Mr. Leighton's figures of those parts. Among the strange forms that I have gathered this season, I see there is Carex Ecklonii, Kunze, 'Supplement zu Schkuhr's Riedgräzer (Carices), tab. 5; but how far this is distinct as a species, I will leave to the judgment of others. In the last edition of the 'British Flora,' Carex speirostachya is referred as a variety to the C. fulva of Goodenough. Goodenough tells us that his C. fulva is only a variety of C. flava; Leighton tells us that C. flava and Œderi are the same; and if I add the C. Ecklonii of Kunze to the list, we shall see that it will take Carex speirostachya, fulva, flava, Œderi and Ecklonii to make Carex flava: now I should think, for my own part, that these are sufficient to make one species, if not, we may add the Trasus Hostianus of Gray, &c.—*Samuel Gibson*; *Hebden Bridge*, *October* 18, 1841.

81. *Remarks on the List of Plants*, (Phytol. 77). I embrace this opportunity of making a few remarks on the list of species and varieties said to be new to the British Flora, and described in Leighton's 'Flora of Shropshire.' For my own part I find (with the exception of the Rubi) very little that is new in this list; for surely we cannot consider such plants as Oxalis Acetosella β. purpurea new to the British Flora, since we find it mentioned in the fifth edition of Withering's Botany, as growing in a lane between North Owram and Halifax; but that locality has long been destroyed; the plant however was rediscovered about six years since by Mr. Riley of Halifax, about a mile from the place mentioned by Withering. Next we find the plant mentioned by Gray in his work, at page 631, where he says—"plant small, rather villous, petals bluish-purple." Again we find in Smith's 'English Flora,' at page 323, flore purpureo, Dill. in Raii Syn. 281. Ranunculus fluitans and tripartitus, we received descriptions of twenty-one years ago in Gray's Botany. The Hypericum tetrapterum of Leighton is Hypericum quadrangulum of Smith, &c., so that we have nothing new in that except the name; Hypericum maculatum I have not been able to find in Mr. Leighton's work.—*Id.*

82. *Avena alpina*, (Phytol. 75). In reply to Mr. Simpson's note on Avena alpina, I would say that the plant was known to Mr. Baines as having been found in the county, as I gathered the plant, in company with Mr. Baines, in June, 1836, about two miles from Tadcaster. The reason of its not appearing in the Yorkshire Flora is that we do not consider it distinct as a species from Avena pratensis, as we have examined numerous specimens, and find none of the characters that are laid down by Hooker to be constant. The plant I believe to be a very common one, as I received specimens last season from Buxton in Derbyshire, and from Wales; I also received specimens from the Yorkshire side of Teesdale. In addition to the above localities, I have a specimen of Avena alpina which I gathered near Settle in 1838. In order to

show that Mr. Baines and myself are not alone in considering Avena alpina and pratensis to be the same species, I copy the following from a note that I received from Mr. Tatham a short time ago. "Dost thou think there is any real difference between Avena pratensis and alpina? If the panicle being compound or simple is any distinction, we have them both, but I think they are one and the same." Mr. Tatham further says in a note dated September 9, 1841, "I do not think the roughness or smoothness of the sheaths of Avena alpina is at all to be depended on, for I have seen both extremes in the same tuft."—*Id.*

83. *Sedum rupestre*, (Phytol. 68). Your correspondent says "no doubt introduced originally." Why he should suppose so I know not. The plant is by no means local in its distribution upon the rocks, and frequently occurs in the most inaccessible parts. —*Leo. H. Grindon; Manchester, October* 20, 1841.

84. *Habenaria chlorantha*, (Id. 70). The species which I have always considered to be the *bifolia*, is very common in woods and shady places about Bristol. Near Butcombe, Somersetshire, as well as at Horfield and Stapleton, it grows in most luxuriant profusion. The *chlorantha* I have seen but once, viz. under Cook's Folly—one of the localities quoted for it. Does it really deserve to rank higher than as a variety of H. bifolia?—*Id.*

85. *Anagallis cærulea*, (Id. 76). I thought botanists were long since agreed as to this plant being only a variety of A. arvensis. It grows in cornfields upon the lias at Knowle and Horfield, near Bristol, and *only on the lias*, never appearing elsewhere with blue flowers, or retaining its colour when sown in ordinary garden soil, as I have myself proved.—*Id.*

86. *Equisetum fluviatile.* I gathered a curious variety of this plant in August, 1841, on the bank of the Manchester and Sheffield railway, near Glossip. This specimen was leafy and in good fruit; the catkin was topped by a prolongation of the frond about twelve inches in length. Mr. Francis, in his 'History of British Ferns,' mentions a similar specimen having been gathered near Bangor, in 1836.—*Joseph Sidebotham; Manchester, November* 4, 1841.

87. *Plants observed in the Neighbourhood of Shoreham, Sussex.* During the early part of July, 1838, my brother and myself spent some days at Shoreham, on the coast of Sussex, principally with the view of collecting a few plants from that locality. Amongst the great mass of shingle thrown up by the sea, we found Vicia lutea very abundant. Galeopsis Ladanum, specimens very small, scarcely exceeding 6 inches in height. Glaucium luteum, abundantly displaying its large bright yellow flowers to the saline breeze. A few solitary plants of Crambe maritima (which had not flowered that season) between the pier-head and the preventive station; and in the same locality we observed a few patches of Crithmum maritimum, just coming into flower. Sedum anglicum, plentiful, displaying its beautiful white starry flowers out of reach of the shingle; as was also the case with Statice Armeria, Frankenia lævis, Arenaria marina and Ervum hirsutum. Ruppia maritima, very plentiful in the small pools of salt water in the marshes adjoining, (towards Worthing); and on their margins Triglochin maritimum, Œnanthe pimpinelloides, Glaux maritima and Juncus acutus, and where the tide flows over, Salicornia herbacea and Atriplex portulacoides, very abundant. At the harbour's mouth, against the piers, we found a few plants of Cakile maritima and Statice spathulata. Centaurea Calcitrapa abundant. Linum angustifolium very abundant at the foot of the cliffs towards Brighton, near Kingston. Rottbollia incurvata, on the sands just above high-water mark. Chenopodium maritimum and Silene

maritima everywhere. Coronopus didyma, in various places by the road sides. Although we very carefully examined the whole line of beach between Brighton and Worthing, we could not find a single specimen of Trifolium stellatum: the only habitat, as stated in the 'Botanist's Guide' &c. is "between the sea and Shoreham Harbour in the greatest profusion," and supposed to have been originally introduced in ballast. I should very much wish to know if any specimens have been taken from this station of late years. I have specimens in my herbarium from this locality, collected upwards of thirty years ago; the great alterations that have taken place at the entrance of the harbour, by the erection of piers &c., have in all probability destroyed the habitat. On our return from Shoreham we observed Sambucus Ebulus very plentifully but not in flower, by the sides of the road, against the toll-gate at Bramber and in the fosse at the foot of the old castle. Iris fœtidissima, very plentiful and in full flower.—*J. D. Salmon; Godalming, November* 8, 1841.

88. *Cyperus longus in the Isle of Wight.* It will, I have no doubt, interest the readers of 'The Phytologist' to know that I have detected "the tall and graceful Cyperus," as my friend the Rev. G. E. Smith very justly calls it, in three distant localities within the island. In two of the above stations it is abundant; in the third, a wet meadow below Carisbrook Castle, on the S.E. side, very rare, a specimen or two only having been gathered. I first detected Cyperus longus, which I had always calculated on eventually finding with us, quite accidentally, in a low meadow at Apes Down,* between Carisbrooke and Swainston, the seat of Sir Richard Simeon, Bart., on whose land it grows, and within a mile of the house on the Carisbrooke road, at the bottom of a steep pitch, the meadow being on the right coming from Carisbrooke, and nearly opposite a small farm. This was in 1839, and the next year I found the plant in still greater quantity, covering at least half an acre, in a marshy meadow through which runs a little stream, between the new lighthouse at St. Catherine's Point, and empties itself into the sea at Old Castle Point by Puckaster, the station being much nearer the latter, and below the farm of Little Buddle, by which there is a path that conducts almost to the spot, within ten minutes walk of the Sand-rock Hotel. The Cyperus begins to flower about the middle of August, but is in its greatest perfection a month later, after which it is usually mown down by the occupier of the land, as green fodder for his cattle, to which this plant, from its sweetness, is very acceptable. — *Wm. Arnold Bromfield; East Mount, Ryde, Isle of Wight, November* 8, 1841.

89. *Note on Tamarix gallica*, (Phytol. 91). Pulteney long since gave Freshwater Gate as a habitat [for this plant], but I could never find it there, except as a cultivated tree, by the hotel, a condition which, of course, excludes it entirely from notice amongst our indigenous productions. As far as my own observation goes, the genus Tamarix should be expunged, with Staphylea and some others, from the British Flora, since I cannot ascertain that it is even naturalized, strictly speaking, in any of its recorded stations. At Hastings it certainly does not grow spontaneously, though stated to do so by Goodenough, and it has but too evidently been planted at St. Michael's Mount and other places in Cornwall, as well as at Languard Fort, and in every other spot where I have had an opportunity of seeing it.—*Id.*

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* This place must not be confounded with Apse Heath, or Apse Castle, which are in a different part of the island, though the orthography was probably once the same in all.—*W. A. B.*

90. *Flora of the Isle of Wight.* Anxiety to render as complete as possible a Flora of this island, on which I have been for some years past, and am still engaged, and a desire to verify personally all the species and their respective stations, lead me earnestly to request from such gentlemen as have botanized in the island, a communication of their discoveries, which I shall at all times feel most happy and grateful to receive and acknowledge, and most particularly so when accompanied by specimens, however small, of the plants found by them.—*Id.*

91. *Discovery of Monotropa Hypopitys at Cawdor, Nairnshire.* Dr. Balfour lately paid me a hurried visit, on his return from a botanical excursion to Skye and the outer Hebrides, when he was so fortunate as to make a very interesting addition to the Flora of this district, by the discovery of Monotropa Hypopitys in the wood of Cawdor, about a mile from here : I may, I believe, call it an addition to the Flora of Scotland, for Mr. Watson does not mention it in his very accurate 'Botanist's Guide,' as occurring in Scotland. Dr. Balfour could get only a single specimen ; some days afterwards I succeeded in getting a few more, growing under birch and oak, where the ground was thickly covered with a moss (a species of Hypnum I believe), so densely indeed that the grass was almost choked with it, a blade only being to be seen here and there. The specimens of Monotropa were generally about a yard apart, sometimes two being together. I could trace the fibres of the Monotropa a very little way beyond those of the moss, and did not observe any connection between them and the roots of the oaks and birch, the only trees growing near them; and am of opinion that if they draw any part of their nourishment from the roots of the neighbouring trees, they certainly do derive considerable support from the vegetable soil in which they grow.— *Wm. Alex. Stables ; Cawdor Castle, Nairn, November* 10, 1841.

92. *Errata in Mr. Flower's List of some of the rarer Bristol Plants*, (Phytol, 68). Page 68, line 13, for *Braston* read *Bourton* : lines 37 & 38, for *Peupole* read *Penpole.* Page 69, line 21, after *Lotus tenuis*, add "Meadows about Sea Mills." Having studied the characters of this plant for the last three seasons, I cannot consider it anything more than a variety of Lotus corniculatus. Page 70, line 22, after *Allium* add *carinatum.—Thos. B. Flower ; 8, Surrey Street, Strand, November* 13, 1841.

93. *Lastræa Thelypteris.* I have lately observed this interesting fern, in great plenty, on Birtle and Glastonbury Moors, Somerset. I believe it is by no means frequent in this county.—*Id.*

94. *Phyteuma orbiculare.* This plant occurs in the greatest abundance on Roundway Down, near Devizes, Wilts, in company with Asperula cynanchica, Thesium linophyllum, Juniperus communis and Spiræa Filipendula.—*Id.*

95. *Cuscuta Epilinum.* On flax in plenty, between Comptin Martin and Ubley, also at West Harptree, on the road to Cheddar, Somerset.—*Id.*

96. *Arabis stricta*, (Phytol. 68). I have much pleasure in thinking the habitat of Arabis stricta on St. Vincent's rocks, may still be preserved. Some years since I sowed a quantity of seed in spots whence I had previously gathered plants, and have again done so this year. I wish it to be particularly understood that my cultivation has been confined to known spots, and to St. Vincent's Rocks *alone.* For doing this I have been gratified by receiving thanks from the most distinguished botanist of the day.—*Fredk. Rupert ; Brislington, Nov.* 17, 1841.

97. *Corrections and Additions in Mr. Mill's List of Plants in the Isle of Wight*, (Phytol. 91). Line 34, for *Triticum Nardus* read *T. junceum.* Tamarix gallica, (line 37) has most probably been introduced into the locality near Yarmouth. Poa bulbosa

(line 42) must be erased from the list: the mistake arose from an imperfect specimen of a grass from Alum Bay having been compared by a friend with continental specimens of Poa bulbosa, in its viviparous state. The Alum Bay plant was afterwards found to be an Agrostis. To the plants growing in salt marshes at Yarmouth, add Triglochin maritimum and Potamogeton pectinatum. To those of the New Forest add Triglochin palustre.—*J. S. Mill; Kensington, December* 20, 1841.

98. *Erratum.* (Phytol. 111), line 19, for Entomol. *No.* 90, read Entomol. *page* 159.

99. *Death of Professor Don.* It is our painful duty to announce to our readers the loss which Botany has sustained in the death of our esteemed and lamented friend,—Mr. David Don. His merits as a botanist are abundantly testified by his numerous papers and essays published in periodicals or transactions during the last twenty years. his worth as a man requires a more particular notice. It has never been our lot to meet with a botanist equally able and willing to afford information to the student: his bibliographical knowledge was most extensive; so much so indeed, that on the name of an author being mentioned to him, he would instantly inform the enquirer of all the works written by that author, of the value of their authority, their dates, principal contents, and the library in which they might be found; and the slightest enquiry would immediately elicit a detailed statement of every serviceable fact relative to the subject suggesting it. Nothing could exceed the prompt and cheerful manner with which he entered into all debateable questions relating to botanical nomenclature, or his rigid impartiality in asserting the right of priority: nothing could exceed the kindness and zeal with which he assisted every student, however complicated or however trite the subject laid before him. Indeed we may safely say, that in him the botanical enquirer has suffered a loss never to be repaired.—

> "We ne'er shall look upon his like again."

Mr. Don was born at Forfar on the 21st of December, 1779; and his descriptions of new and rare native plants found by his father in Scotland, proves Mr. Don's early proficiency in the study of Botany. He came to London in 1819, and in 1822 was elected librarian to the Linnean Society, an appointment which he held during the remainder of his life. In 1836 he was appointed Professor of Botany at King's College, and commenced his first course of lectures in the May of the same year. He died at the house of the Linnean Society, at 1 o'clock in the morning of the 8th of December, 1841, after a painful and lingering illness of upwards of twelve months, and was buried on the 15th at the Kensale Green Cemetery. In addition to the immediate relatives of the deceased, the funeral was attended by Dr. Brown, Sir W. J. Hooker, Messrs. Bowman, Forster, Bentham, Bennett, Anderson and Smith.

We insert below a chronological list of Mr. Don's works, so far as we have been able to ascertain them.

Descriptions of new or rare native plants found in Scotland by the late Mr. George Don, of Forfar. Printed in the Wernerian Memoirs, iii. 1821.

Descriptions of new plants from Nepaul, in the herbarium of A. B. Lambert, Esq. Wern. Mem. iii. 1821.

Monograph of the genus Saxifraga. Linnean Transactions, xiii. 1822.

Illustrations of the natural family of plants called Melastomaceæ. W. Mem. iv. 1823.

Monograph of the genus Pyrola. Id. v. part 1. 1824.

Descriptions of nine new species of Carex from Nepaul. Lin. Tr. xiv. pt. 2. „

Description of Cowania, a new genus of plants; and of a new species of Sieversia. Id. xiv. pt. 3. 1825.

Prodromus Floræ Nepalensis. 1825.

On the classification and division of Gnaphalium and Xeranthemum, *Lin.* Wern. Mem. v. pt. 2. 1826.

Description of the genus Malesherbia of the 'Flora Peruviana.' Edinburgh New Philosophical Journal. 1827.

Description of Lophospermum, a new genus of Scrophularineæ. Lin. Trans. xv. pt. 2. 1827.

Descriptions of Columellia, Tovaria and Francoa. Ed. New Phil. Journ. 1829.

Observations on Philadelpheæ and Granateæ. Id. „

On the affinities of the Empetreæ. Id. „

On the characters of Darwinia, Brunsfelsia, &c. Id. „

Attempt at a new classification of the Cichoraceæ. Id. „

On the affinities of Vellosia, Glaux, &c. Id. 1830.

Monograph of the family Cunoniaceæ. Id. „

On the origin & nature of the ligulate rays in Zinnia &c. Lin. Tr. xvi. pt. 2. „

Descriptions of the new genera and species of Compositæ, belonging to the Floras of Peru, Mexico, and Chile. Id. 1830.

On the characters &c. of certain genera of the Flora Peruviana. Ed. New Phil. Journ. 1831-2.

On the Rhubarb of commerce, the purple-coned Fir of Nepaul, and the Mustard-tree. Id.

Descriptions of some new species of Malesherbia, Kageneckia, Quillaja &c. Id. 1832.

Note on the Cow-tree of the Caraccas. Id.

On the characters and affinities of the genus Codon. Id. 1833.

On the connexion between the calyx & ovarium in certain Melastomaceæ. Id. „

On the plant which yields the Gum Ammoniacum. Linn. Trans. xvi. pt. 3. „

On the Tropœolum pentaphyllum, *Lam.* Id. xvii. pt. 1. 1834.

Additional Observations on ditto. Id.

On the æstivation of certain plants, formerly referred to Cinchona. Id. „

New arrangement of the Ericaceæ. Ed. New. Phil. Journ. „

On the anomalous structure of the leaf of Rosa berberifolia. Id.

Remarks on some British Ferns. Linn. Trans. xvii. pt. 3. 1836.

Descriptions of five new species of Pinus from California. Id. „

Descriptions of Indian Gentianeæ. Id. xvii. pt. 4. 1837.

Descriptions of two new genera of Coniferæ. Id. xviii. pt. 2. 1839.

Description of a new genus of Bignoniaceæ, (Catophractes). Id. xviii. pt. 3. 1840.

Descriptions of the Indian species of Iris. Id.

Account of the Indian species of Juncus and Luzula. Id.

Monograph of the genus Disporum. Id. xviii. pt. 4. 1841.

Monograph of Streptopus, with the description of a new genus (Prosartes) separated from it. Id.

List of the plants collected by Mr. Fellowes in Asia minor, with descriptions of the new species. 1841.

The new series of Sweet's British Flower-Garden, commenced about 1830.

ART. XLVI.—*Proceedings of Societies.*

LINNEAN SOCIETY.

November 16.—Edward Forster, Esq., V.P., in the chair. Specimens of a hybrid Linaria, found growing near L. repens and L. vulgaris, were exhibited. Read, a paper on Vegetable Monstrosities, by The Rev. W. Hincks; illustrated by numerous specimens, both dried and preserved in spirits, of monstrosities caused by adhesion, transformation, and increase and decrease of parts. Read also, the commencement of a paper by Dr. Gardner, on the Influence of the Dew-Point on the Temperature of Plants.

December 6.—Robert Brown, Esq., V.P., in the chair. Specimens of Scrophularia Ehrharti, collected in Bellsize Park, were exhibited. Read, a paper by Mr. D. Cooper, illustrated by drawings, on the Structure of the Fruit of a Species of Phytelephas, called "Vegetable Ivory." The albumen of the seed is so hard as to take a finer polish than common ivory. Under the microscope it exhibits a tubular structure. Read also, the conclusion of Dr. Gardner's paper, on the Influence of the Dew-Point on the Temperature of Vegetables. From a series of experiments the author concludes,—1. That vegetables possess no specific heat. 2. That the variations observed in plants are chiefly due to the state of the dew-point, the elevation of which causes an increase of heat by checking evaporation, whilst its depression, by encouraging evaporation, produces a decrease of heat. 3. That the sensible heat of plants is directly as the temperature of the air and the chemical action proceeding in their cells, and inversely as the radiation, evaporation and conducting power of the air and soil; the chemical action increasing with an increase of atmospheric temperature, the amount of heat resulting therefrom increasing also.

BOTANICAL SOCIETY OF EDINBURGH.

Thursday, *November* 11, 1841. Professor Graham in the chair.

Donations to the Herbarium were presented from Dr. Von Martius, and to the Library from Mrs. W. Campbell,—and Professor Balfour mentioned that since last meeting he had been in communication with the Natural-History Society of Athens, to which he had transmitted a set of the Society's publications.

The following papers and communication were read:—

1. Account of a Botanical Excursion to Skye and the Outer Hebrides, during the month of August, 1841, by Professor Balfour and Mr. Charles C. Babington; and remarks on the plants observed by them in the Islands of North Uist, Harris, and Lewis. In this communication the authors drew attention chiefly to those facts which tend to illustrate the variations produced by climate, soil and elevation. In Skye their observations were confined to the south-western part of the island. They landed at Armadale, and passing by Knock, Ord, and Strathaird to Loch Coiruisg, they crossed the Cuillin Hills to Sligachan, and from thence went by Bracadale to Dunvegan. Among the plants observed in this route may be mentioned Rumex aquaticus, Atriplex rosea, Arabis petræa, Myriophyllum alterniflorum, Potamogeton oblongus, Orobanche rubra, Mimulus luteus, &c. From Dunvegan they crossed the Minsh to Loch Maddy in North Uist, and after examining the botany of that island they proceeded to Harris and Lewis. On the lofty mountains of the forest of Harris, some of which they reckoned to be at least 3000 feet high, they were surprised to find very few alpine plants, for which they could only account by supposing the climate of the island to be so modified by the vicinity of the Great Atlantic Ocean, as to be too mild for the production of the usual alpine vegetation. The following are mentioned among the more interesting plants found in Harris and Lewis:—Lamium intermedium, Ruppia maritima, Pinguicula lusitanica, Thalictrum alpinum, Salix herbacea, Aira alpina, Saussurea alpina, Luzula spicata, Arabis petræa, Silene acaulis, Blysmus rufus, Juncus balticus, Scirpus lacustris, &c. They also gathered Hymenophyllum Wilsoni among rocks upon the summit of Chesham, apparently the highest mountain of the range. The number of species observed in North Uist, Harris and Lewis, during this excursion, was 311, of which 21 belonged to the orders Filices, Lycopodiaceæ and Equisetaceæ. The number of *true* ferns was 14; being in the proportion of 1 to about every 22 of the flowering plants; that is, they form about 1-22nd part of the whole number of species at present known to be indigenous in these islands. Mr. T. Edmonston, jun., records 249 species of native plants for the Shetland Islands, (Ann. Nat. Hist. viii. 287), of which 14 are ferns, Lycopodiaceæ and Equisetaceæ, the number of true ferns being 7, thus showing a proportion of 1 fern to about 33 flowering plants. Owing to the necessarily imperfect character of the Long Island list, it is impossible to draw any satisfactory conclusions from the above proportions, between the flowering plants and ferns, yet it may be noticed that there is a great preponderance of ferns in both these northern and insular countries, although the actual numbers recorded are remarkably small. The ferns in Shetland are less numerous than those in Iceland or Faroe, while those of the Long Island exceed the Faroe species by four, and are exactly equal to the number found in Iceland,—the Faroe and Iceland lists being the smallest recorded in Mr. Watson's valuable paper on the Distribution of Ferns, recently published in the Transactions of this Society, (vol. 1, p. 89). The more mountainous character of the Long Island will probably account for the much larger proportion (1 to 22), which its ferns bear to the flowering plants, than that which appears to exist in Shetland — for although considerable allowances be made for the imperfect state of the Long Island list, on account of the short time employed in its preparation, yet it does not seem probable that the number of its flowering plants will be so far increased as to raise their relative proportion as high as that shown to exist in Shetland, since this would require an addition of 151 species, even if the number of

ferns remained stationary. The communication concludes as follows:—"We must be allowed to impress upon the Society, that this tour is not of the less interest for not having produced any plants new to the British Flora, since we consider the determination of the Flora of any district, peculiar either in its structure or situation, to be of importance, as elucidating the effect of soils or climate upon the distribution of plants. We would also take this opportunity of expressing our sense of the obligations under which we lie to the gentlemen of Skye and the Long Island, who in a truly kind and liberal manner exercised their hospitality towards our party, and greatly contributed to the pleasure, indeed we may say to the success, of the excursion."

2. On the Anatomy and Physiology of the seed of Phaseolus vulgaris, or French Bean; by Dr. Spencer Thomson, Burton-on-Trent. In this paper, which was accompanied by illustrative drawings, the author, after giving an elaborate dissection of the seed, stated a variety of circumstances relative to its mode or course of germination, and traced the analogy between that process and the growth of the fœtus in the animal kingdom. He also noticed M. De Candolle's views on the subject, and pointed out the results which seemed to arise from them.

3. On the discovery of three species of Fungi, new to the British Flora, viz., Tuber ferrugineum, Æcidium Thesii, (Leefe), and Uredo Symphyti, (De C.); by The Rev. J. E. Leefe. With regard to the first of these fungi, Mr. Leefe says—"The specimens are in general of a rich red bronze colour. Their smell is peculiarly strong and penetrating, so that on receiving a letter enclosing specimens, Mr. Berkeley can, before opening it, determine positively what it contains."

4. Notice of the discovery of Cerastium triviale, β. holosteoides, (Fries), near Kinfauns Castle, Perthshire; and of Rubus arcticus, near the head of Glen Tilt, Perthshire; by Mr. J. Robertson, Kinfauns Garden. Considerable interest was manifested respecting the occurrence of the latter species in the British Flora, and some discussion took place with regard to its identity; but the specimen exhibited was so imperfect as to leave doubts whether the discovery ought yet to be fully relied on, especially as our botanists have more than once been disappointed in this respect.—*Edinburgh Evening Post, November* 17, 1841.

BOTANICAL SOCIETY OF LONDON.

November 29.—Fifth Anniversary Meeting. John Edward Gray, Esq., F.R.S., &c., President, in the chair. The Report of the Council was read, from which it appeared that 20 members had been elected since the last Anniversary, and that the Society now consisted of 142 members. The donations to the Library amounted to 220 volumes, many of them valuable works. The Council had determined that the Report on the Scientific Proceedings of the Society should appear at the close of the winter season, and it was fully expected that a nearly complete collection of British plants would be ready for use in the course of the present winter, and also that a Foreign herbarium of several thousand specimens would soon be in equally good order. The new regulations as to the distribution of specimens, whereby the members are enabled to receive their parcels shortly after their lists of desiderata are sent in, had been much approved of, and the appointment of a paid Curator had been equally advantageous. The Report was unanimously adopted. A Ballot then took place for the Council for the ensuing year, when the Chairman was re-elected President, and he nominated John George Children, Esq., F.R.S., and Hewett Cottrell Watson, Esq., F.L.S., Vice-Presidents. Mr. G. E. Dennes, F.L.S., Mr. J. Reynolds, and Mr. T. Sansom, were respectively re-elected Secretary, Treasurer, and Librarian. Additional local Secretaries were also appointed.

December 17.—John Reynolds, Esq., Treasurer, in the chair. Donations of British plants were announced from Messrs. Hewett C. Watson, J. Seeley, G. Hubbard, S. P. Woodward, G. Rich, The Rev. W. T. Bree, and Miss M. Beever; British Fungi from Mr. D. Stock; and British mosses from Miss A. Worsley. Mr. Hewett C. Watson, V.P., presented specimens of the following undescribed British plants:—

1. *Linaria Bauhini.* Discovered near Penryn, in Cornwall, in 1830 or 1831, by Mr. Watson; again found at Shirley, near Southampton, in 1840; also by The Rev. W. Hincks, in the county of Cork, last summer. It is the Antirrhinum Bauhini of Gaudin's 'Flora Helvetica,'—the Antirrhinum genistifolium of Suter's 'Flora Helvetica,'—but not the plant so named by Linnæus. Probably also it is identical with Linaria Italica of Treviranus, and of Koch's 'Synopsis Floræ Germanicæ et Helvetiæ.'

2. *Lolium multiflorum.* Discovered in a pea-field at Claygate, Surrey, in August, 1840, by Mr. Watson; also in other parts of England, during the past summer, by different botanists. It is Lolium multiflorum of Lamarck, Koch, and other continental botanists, who distinguish it from Lolium perenne by its annual root, numerous flowers in the spikelets, and the long awns. The two last are varying characters, and the plant is reduced to a variety of Lolium perenne by Bertolini, in the 'Flora Italica.'

3. *Bromus commutatus.* This grass is frequent in England and Scotland, but has constantly been confused with other species of Bromus. Smith first mistook it for Bromus arvensis, and afterwards, in the 'English Flora,' described it jointly with another species under the name of Bromus racemosus. The specimens distributed by the Botanical Societies of London and Edinburgh, under the name of Bromus arvensis, all probably belong to Bromus commutatus, and it is left a question whether the former species is indigenous to Britain. Independently of more technical distinctions, there is one obvious enough at first sight, namely, that the flowers of Bromus arvensis (Linn.) are only half the size of those of Bromus commutatus, (Schrader), as was shown in an accompanying specimen of Bromus arvensis from Germany.—*G. E. D.*